

# School Play Spreadsheet

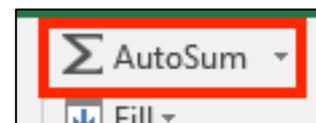
1. Open the school play spreadsheet
2. Change the numbers from cell **B5 to D8** to **Currency** in pounds and pence



3. Add a **SUM** function in cell **B9** to add up the numbers in **B5 to B8**

**Repeat** the same function in cells **C9** and **D9**

**ATTENTION:** check the right cells are being selected



4. Use a **SUM** function in cell **G9** to add up the total costs (cells B9 to C9)

**ATTENTION:** Make sure the function chooses the right cells

5. Use a **SUM** function in cell **G11** to add up the total number of seats available (cells B11 to G11)

**ATTENTION:** Make sure the function chooses the right cells

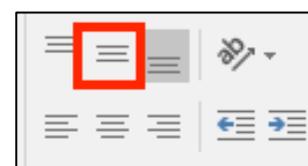
6. Use **wrapped text** in cell F11

- a. click in cell **F11**
- b. press the **Wrap Text** button on the ribbon



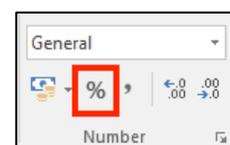
7. Format row 11:

- a. **click** on the **11** on the left to highlight the whole row
- b. click the **Align Text Middle** button on the ribbon



8. Change the numbers in row 14 to %ages:

- a. click in cell **B14**
- b. click the **% button** on the ribbon (underneath the General drop down)
- c. **repeat** this in cells **C14** and **D14**



9. Calculate the number of tickets sold: click in cell **B15** > enter the formula: **=B11\*B14**

**Repeat** the formula in cells **C15** and **D15** for those columns

10. Enter the ticket price: click in cell **G12** > type the value: **1.20** > **format** the cell as **Currency**

11. Calculate the income for each night: click in **B16** > **=B15\*G12**

## Cell Referencing

12. **Copy** the formula in **B16** across into cells **C16** and **D16**

That doesn't work. Click in cell C16 and check the formula bar at the top of the screen.

You want C15 in your formula, but you want to keep G12 in place rather than change each time. To do that we have to get clever and pin G12 in place.

13. **Delete** the formulas in cells **C16** and **D16**
14. **Click** back in cell **B16**
15. Click in the **formula bar** at the **top** and change the formula to: **=B15\*\$G\$12**  
The dollar sign pins the G and the 12 in place. This is called **absolute cell referencing**. We still want the B15 reference to change so we don't pin it (this is called **relative cell referencing**)
16. Now **copy** the formula across into cells **C16** and **D16**  
Now it should work. By combining relative and absolute cell referencing we have a better spreadsheet.

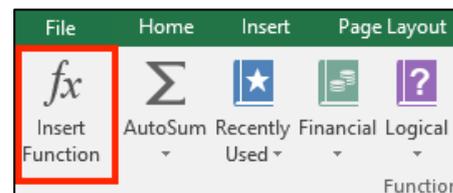
## Finishing the spreadsheet

17. Calculate the total income in cell **G16** using a SUM function
18. In cell **G18**, calculate the **profit** (the **difference** between income and costs)
19. **Format** the sheet:
- add a title and format is as Comic Sans, size 24, bold, italic and in red text
  - highlight cells **B3 to D3** and click the **Merge and Centre** button on the ribbon
  - put **gridlines** around the cells that need them – use the **All Borders** button
  - turn the worksheet landscape: **Page Layout** > **Orientation** > **Landscape**
20. **Rename** the worksheet: **right click** on the **Disco** tab at the bottom of the screen > **Rename** > rename the tab: **School Play**
21. You need to add some details to the header and footer:
- click Insert > Text > Headers and Footers
  - add a **page number** in the right footer – use the buttons at the top
  - add the **filename** in the left header
  - add the **worksheet name** in the centre header
22. To close the header and footer view click **View** > Normal – the header and footer haven't gone – click **File** > **Print** to check that they are still there

## Using IF functions

IF functions allow you to put a value in a cell that depends upon a value in another cell. We can use it to tell Chris if she made a profit or not

23. Click in cell **G20**
24. Click **Formulas** on the ribbon at the top
25. Click the **Insert Function** button at the **top left**
26. In the **Search for a function** box type **if** and press **Go**



27. Choose **IF** from the list – it should be at the top – and press **OK**

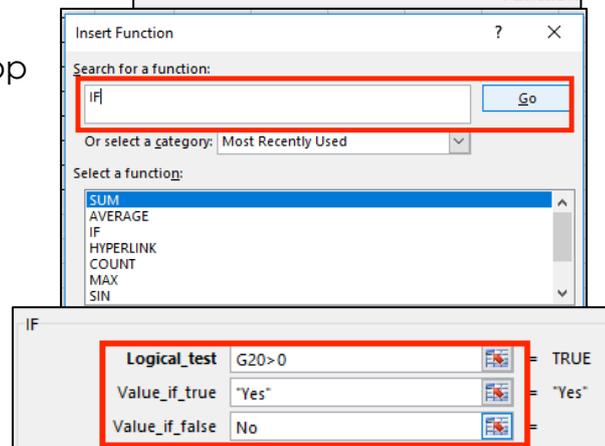
A new box appears

28. In the **Logical test** box type: **G18 < 0**  
This is saying, is whatever's in G18 less than 0

29. In the **Value if true** box type: **Made a loss**
30. In the **Value if false** box type: **Made a profit**
31. Click **OK** and then press **Enter** (Return)

Click in cell **G18** and check out the function in the formula bar

Try changing the price of a ticket so that the profit value changes



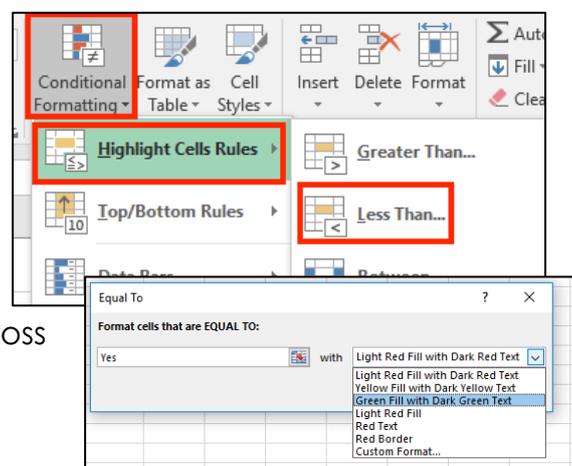
## Conditional formatting

Conditional formatting can change the colours of cells based on their value.

32. Click in cell **G18**
33. Click **Home > Conditional Formatting >** choose **Highlight Cell Rules > Less than**
34. Type **0** in the box and choose a **red** format from the drop down

This will make the contents of the cell red if they are less than 0 – i.e. if the play made a loss

35. Click **OK**



You can add more than one conditional formatting rule to a cell. Try to add a new rule to make the cell green if the play made a profit.

Try changing the price of a ticket so that the profit value changes

**Done? Go to Point 31 on the Level 3 sheet**